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**DOCKET NO. D-2009-025 CP-2**

**DELAWARE RIVER BASIN COMMISSION**

**Discharge to a Tributary of Special Protection Waters**

**Lehigh Carbon Community College  
Wastewater Treatment Plant  
North Whitehall Township, Lehigh County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Lehigh Carbon Community College (LCCC or docket holder) on March 12, 2012 (Application), for review of modifications to an existing WWTP. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0051799 for this WWTP was approved by the Pennsylvania Department of Environmental Protection (PADEP) on March 10, 2008, effective April 1, 2008. Renewal of the NPDES Permit is expected shortly. Docket No. D-2009-025 CP-1 was issued by the Commission on December 9, 2009 and approved the modifications requested, however the docket holder never performed said modifications. The PADEP issued Water Quality Management (WQM) Permit No. 3909404 for the modifications on January 20, 2010.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on March 5, 2013.

**A. DESCRIPTION**

- 1. Purpose.** The purpose of this docket is to approve the installation of two new final clarifiers and aerobic digesters at the existing 36,225 gallons per day (gpd) LCCC WWTP and to renew approval of the existing discharge. There is no change in hydraulic design capacity being proposed and the units are in addition to the existing treatment at the facility, not a replacement.
- 2. Location.** The WWTP will continue to discharge treated effluent to an unnamed tributary (UNT) of Jordan Creek at River Mile 183.66 – 16.25 – 13.79 – 1.26 (Delaware River – Lehigh River – Jordan Creek – Unnamed Tributary) via Outfall No. 001, in the drainage area to

the Lower Delaware Special Protection Waters (SPW) area. The WWTP and its related discharge are located in the North Whitehall Township, Lehigh County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 39' 18"	75° 36' 28"

3. **Area Served.** The WWTP will continue to serve the LCCC and adjacent vocational school. For the purpose of defining the Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The docket holder's 36,225 gpd WWTP is designed to treat sanitary waste from the LCCC and adjacent vocational school.

b. **Facilities.** The existing WWTP consists of a comminutor, a flow equalization tank, two (2) aeration tanks, four (4) secondary clarifiers, a filter dosing tank, two (2) sand filters, a chlorine contact tank, and a sludge holding tank.

The proposed modifications to the WWTP include the addition of two (2) secondary clarifiers, two (2) aerobic digesters, and supporting equipment. There is no change in hydraulic design capacity being proposed and the units are in addition to the existing treatment at the facility, not a replacement.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The docket holder has installed a generator capable of providing power in the event of an emergency. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and shall have a remote alarm system that continuously monitors plant operations. The docket holder has installed remote alarms at the WWTP that continuously monitor plant operations. (SPW)

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) suitable to Commission standards. (SPW)

The project facilities aren't located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a (State-approved) facility.

c. **Water withdrawals.** The potable water supply in the project service area is supplied by on-site wells whose withdrawal is less than 100,000 gpd as a 30-day average and therefore no approval from the DRBC for the withdrawal is required.

d. **NPDES Permit / DRBC Docket.** NPDES Permit No. PA0051799 was approved by the PADEP on March 10, 2008 (effective April 1, 2008) and includes final effluent limitations for the project discharge of 36,225 gpd to surface waters classified by the PADEP as a High Quality-Cold Water Fishery, Migrating Fishery (HQ-CWF, MF) stream. Renewal of the NPDES Permit is expected shortly. The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

**EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit**

OUTFALL 001 (WWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	10 mg/l	As required by NPDES Permit
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES Permit
CBOD <sub>5</sub> (at 20° C) (5-1 to 10-31) (11-1 to 4-30)	10 mg/l (85% minimum removal*) 20 mg/l (85% minimum removal*)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	3.0 mg/l 9.0 mg/l	As required by NPDES Permit
Fecal Coliform (5-1 to 9-30) (10-1 to 4-30)	200 colonies per 100 ml 2000 colonies per 100 ml	As required by NPDES Permit

\* DRBC Requirement

The DRBC requires monitoring of the following parameters that are not currently required under the PADEP NPDES Permit in accordance with the Commission's SPW program.

**EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit**

OUTFALL 001 (WWTP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor & Report *	Quarterly **
Phosphorus*	Monitor & Report *	Monthly*
Nitrate + Nitrite as N*	Monitor & Report *	Monthly*

\* DRBC Requirement

\*\* See DECISION Condition II.v.

e. **Cost.** The overall cost of this project is estimated to be \$420,000.

f. **Relationship to the Comprehensive Plan.** The existing 36,225 gpd LCCC WWTP was incorporated into the Comprehensive Plan upon approval of Docket No. D-2009-025 CP-1 on December 9, 2009. Issuance of this docket will continue approval of the LCCC WWTP in the Comprehensive Plan (See DECISION Condition I.c.).

## B. FINDINGS

The purpose of this docket is to approve the installation of two new final clarifiers and aerobic digesters at the existing 36,225 gpd LCCC WWTP and to renew approval of the existing

discharge. There is no change in hydraulic design capacity being proposed and the units are in addition to the existing treatment at the facility, not a replacement.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations (WQR)* that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation. (Lower SPW)

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The service area of the docket holder is located within in the drainage area to the SPW. Since this project does not entail additional construction and expansion of facilities/service area (i.e., there aren't any new or increased non-point source loads associated with this approval), the NPSPCP requirement is not applicable at this time. Accordingly, DECISION Condition II.r. has been included in this docket.

The discharges included in this docket were in existence when the Lower Delaware River was designated as SPW (January 9, 2005). This docket does not grant approval of any current expansion to the WWTP [as defined in Section 3.10.3 A.2.a.15) of the Commission's *WQR*]. In addition, no substantial alterations or additions [as defined in Section 3.10.3 A.2.a.16) of the Commission's *WQR*] are being undertaken at this time since replacement of the facilities is not occurring and this is considered to be only the first phase of modifications. Therefore, in accordance with *WQR* Section 3.10.3. A.2.d.8), the docket holder is not required to make demonstrations with Section 3.10.3 A.2.b.2) (No Measurable Change to Existing Water Quality), Section 3.10.3 A.2.c.2) [Natural Treatment Alternatives (NTA) Analysis], and Section 3.10.3 A.2.c.3) (Public Interest). However, at such time as the docket holder proposes to make changes to the existing treatment system in accordance with *WQR* Sections 3.10.3 A.2.a.15) or 16), the docket holder may be required to comply with the aforementioned sections as the work proposed may be the second phase of work and may meet the Commission's definition of substantial alterations or additions.

Near the project site, the Jordan Creek has an estimated seven-day low flow with a recurrence interval of ten years of 1.52 mgd (2.35 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 36,225 gpd WWTP is 42 to 1.

The nearest surface water intake of record for public water supply downstream of the project discharge is operated by the North Penn Water Authority on the Delaware River, approximately 58.5 river miles away.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Commission's *WQR*.

### **C. DECISION**

I. Effective on the approval date for Docket No. D-2009-025 CP-2 below:

a. The project described in Docket No. D-2009-025 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2009-025 CP-2; and

b. Docket No. D-2009-025 CP-1 is terminated and replaced by Docket No. D-2009-025 CP-2; and

c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES and WQM Permits if appropriate, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a

docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F. (Trout Waters only)

i. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams.

j. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

k. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement (“Statement”) signed by the docket holder’s professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (2) report the project’s final construction cost as such cost is defined by the project review fee schedule in effect at the time the application was made; and (3) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the docket holder to calculate the DRBC project review fee, the statement must also include (4) the amount of any outstanding balance owed for DRBC review. The outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project’s final cost, using the formula and definition of “project cost” set forth in the DRBC’s project review fee schedule in effect at the time application was made.

l. The WWTP modifications shall be completed within three years of approval of this docket or the docket holder shall demonstrate to the Executive Director that it has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval. If the modifications have not been completed within three years of Docket Approval and the docket holder does not submit a cost analysis demonstrating substantial funds have been expended, Commission approval of the modifications to the existing WWTP shall expire. If Commission approval of the modifications expire under this condition, the docket holder shall file a new application with the Commission and receive Commission approval prior to initiating construction of any modifications.

m. The docket holder is permitted to treat and discharge the categories of wastewaters defined in the “Area Served” section of this docket.

n. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

o. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

p. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

q. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

r. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

s. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission’s Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

t. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

u. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

v. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

w. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

**BY THE COMMISSION**

**DATE APPROVED:**

**EXPIRATION DATE: March 31, 2018**